

By Larry Reichenberger

SORGHUM REVIVAL

Acreage recovers as growers see new markets for milo



These days, grain sorghum—the little crop that could—is making waves. After a long steady decline, milo acreage jumped 22% in 2013. Much of that rebound was spurred by the drought that scorched thirstier crops like corn and soybeans, but milo is also elbowing its way into new markets—both at home and abroad. One primary market is the ethanol industry. That’s because the EPA has ruled that grain sorghum can help manufacturers reach the coveted ‘advanced biofuel’ status.

“Grain sorghum acreage fell to 6.2 million acres in 2012, a 30-year low,

but this year acreage bounced back to 7.2 million,” says Tim Lust, CEO of National Sorghum Producers. “We think there are a number of economic and conservation-oriented reasons why this trend should continue.”

Water use efficiency. A lingering drought and dwindling irrigation water supplies have renewed an appreciation for how efficiently grain sorghum uses water. In a three-year study on John Dolnicek’s farm near Lawrence, Neb., University of Nebraska-Lincoln Extension educator Jenny Rees found that sorghum had a higher water use efficiency and used more

than 2 inches less water than corn or soybeans that were not irrigated.

“In dry years, we believe we have a better chance at a crop with milo than with corn,” says Dolnicek. “In the study, we found that if corn made around 100 bushels per acre, the milo made around 120 bushels. We’ve also found more winter grazing with milo, so despite a lower market price—typically 40 cents per bushel in our area—milo competes economically.”

Lust believes corn acres yielding 100 bushels per acre are a target for sorghum expansion. “There are 4.6 million acres in the U.S. where five-



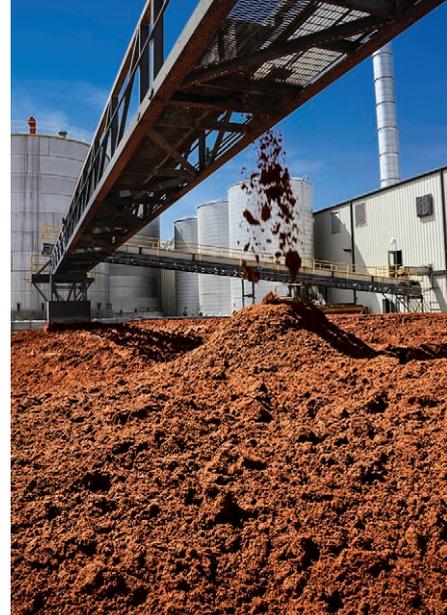
year (2008-2012) average corn yields are in that range. Many of them are in Kansas (1.28 million acres) and Texas (914,000 acres). Most of these were once sorghum acres, so with the drier weather pattern and other factors, they are probably more suited to growing sorghum again."

Ethanol edge. The ethanol industry is also fueling a shift to sorghum acres. Plants in Kansas, Texas, Nebraska, and California have launched efforts to identify optimum hybrids for their areas and educate—or re-educate—farmers on optimum production practices. "If we could get a

reliable supply of grain sorghum we would switch to it for 100% of our needs," says Ralph Scott of Trenton AgriProducts, Trenton, Neb.

"In light of the water allocations that farmers in southwest Nebraska face, we believe milo offers our most dependable source of grain in the future. We want growers to know there is a market for it, and we want them to plant more," explains Scott.

That would happen if the price of sorghum was more competitive with corn, and that's what some ethanol plants are trying to do. In northwest Kansas, Western Plains Energy has



►**Left:** John Dolnicek says growing interest in grain sorghum from the ethanol industry, and the crop's proven water efficiency, should lead more farmers to add it to their crop rotation.

►**Above:** Western Plains Energy's advanced biofuel status has spurred local milo production.

installed an anaerobic digester to provide biogas for the plant's process heat and electrical generation needs. When combined with the use of grain sorghum as a feed stock, this qualifies the facility for 'advanced' biofuel status—a designation which allows it to reap 'advanced' Renewable Identification Number (RIN) credits.

Lust explains that the value of 'advanced' RINs varies, ranging this year from 10 to 40 cents per gallon above the 'traditional' RINs available to ethanol plants using corn. With a bushel of milo producing 2.75 gallons of ethanol, these credits provide a significant incentive for ethanol producers to strive for advanced status—and to boost local grain sorghum prices.

Ground work. At their plant in Ravenna, Neb., Abengoa BioEnergy is waiting on EPA approval of their biomass boiler as a pathway to advanced biofuel status. Meanwhile, Doug Bice, corporate development manager with Abengoa, is laying the ground work with farmers and seed companies to quickly ramp up grain sorghum production when that approval comes.

"Advanced biofuel status is a great opportunity for ethanol producers as well as grain sorghum growers, but everybody has to be profitable to make it a reality," says Bice. ■